

# List of All Chemicals

## P Diospyros gracilis (Ebenaceae)

### How used

Medicinal

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
BETULIN	Wood	--	--		Jim Duke's personal files.
<b>Activities (13)</b>					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory		Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antitumor		Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, Londón. 791 pp.			
Antiviral 6.1 uM					
Aphidifuge		Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A <i>Heliothis zea</i> Antifeedant from the Abundant Birchbark Triterpene Betulin. <i>J. Agric. Food Chem.</i> 38(2): 493-494.			
Cytotoxic 600 ppm					
Cytotoxic 8.6 uM					
Hypolipemic					
Prostaglandin-Synthesis-Inhibitor IC50=119 uM		Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.			
Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULIN	Stem Bark	--	--		Jim Duke's personal files.
<b>Activities (13)</b>					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory		Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antitumor		Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, Londón. 791 pp.			
Antiviral 6.1 uM					
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Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULIN	Bark	--	120.0	-0.39	Jim Duke's personal files.
<b>Activities (13)</b>					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory		Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antitumor		Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, Londón. 791 pp.			
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Cytotoxic 600 ppm					
Cytotoxic 8.6 uM					
Hypolipemic					

IC<sub>50</sub>=119 uM 621-626.

Topoisomerase-II-Inhibitor  
IC<sub>50</sub>=38.6 uM

BETULINIC-ACID	Wood	--	--	Jim Duke's personal files.	
<b>Activities (22)</b>					
Anthelmintic					
AntiHIV EC <sub>50</sub> =2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61 (9): 1090-1095.				
AntiHIV IC <sub>50</sub> =6.5 ug/ml					
AntiHIV 14.8 uM					
Antibacterial					
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Antiedemic					
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.				
Antileukemic					
Antimalarial IC <sub>50</sub> =19-26 ug/ml					
Antimelanomic	New York Times, 3/28/95.				
Antinociceptive					
Antiplasmodial IC <sub>50</sub> =19-26 ug/ml					
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Antiviral 14.8 uM					
Apoptotic					
Cytotoxic 50-100 ppm	Biosyn. Prod. Cancer Chemotherapy (Petit et al)				
Cytotoxic 16.4 uM					
Phospholipase-A2-Inhibitor					
Prostaglandin-Synthesis-Inhibitor 200 ug/ml	Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.				
Prostaglandin-Synthesis-Inhibitor IC <sub>50</sub> =101 uM	Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.				
BETULINIC-ACID	Stem Bark	--	--	Jim Duke's personal files.	
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BETULINIC-ACID	Bark	--	60.0	-0.69	Jim Duke's personal files.
<b>Activities (22)</b>					

AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. <i>J. Nat. Prod.</i> , 61(9): 1090-1095.
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